

WHAT IS CLAIMED IS:

1. An XML-based event marker comprising an event parameter indicating an event, wherein the marker represents a function to detect the indicated event.

2. An XML-based event marker according to Claim 1, wherein the detected event is a user event.

3. An XML-based event marker according to Claim 1, wherein the detected event is a system event.

4. An XML-based event marker according to Claim 1, further comprising a coordinate parameter indicating a position at which the event occurs.

5. An XML-based action marker, comprising:
an object parameter indicating a media object;

an attribute parameter indicating an attribute of the media object; and
a value parameter indicating a value of the attribute,

wherein the marker represents a function to assign the value to the attribute of the media object.

6. An XML-based action marker according to Claim 5, further comprising a begin parameter indicating a time delay to wait prior to assigning the value to the attribute of the media object.

7. An XML-based action marker according to Claim 5, further comprising an order-number parameter indicating a position in a sequence of

actions at which the value to be assigned to the attribute of the media object.

8. An XML-based interpolate marker,
5 comprising:

an object parameter indicating a media object;

an attribute parameter indicating an attribute of the media object;

10 a begin parameter indicating a first time;
an end parameter indicating a second time;

and

an end value parameter indicating a value of the attribute,

15 wherein the interpolate marker represents a function to gradually change a value of the attribute to the end value over a period beginning at the first time and ending at the second time.

20 9. An XML-based condition marker comprising:

an element Id parameter indicating an element;

25 an attribute parameter indicating an attribute of the element; and

a value parameter indicating a value of the attribute,

30 wherein the condition marker represents a function to detect whether or not the attribute of the element possesses the value.

10. A set of XML-based markers comprising:
an event marker indicating an event; and
an action marker indicating a media object,
35 an attribute of the media object, and a value of the attribute,

wherein the markers represent a function to assign the value to the attribute if the event is detected.

5 11. A set of XML-based markers according to Claim 9, wherein the event marker indicates a user event.

10 12. A set of XML-based markers according to Claim 9, wherein the event marker indicates a system event.

15 13. A set of XML-based markers according to Claim 9, the action marker indicating a time delay to wait, after detection of the event, before assigning the value to the attribute of the media object.

20 14. A set of XML-based markers according to Claim 9, the action marker indicating a position in a sequence of actions at which the value is to be assigned to the attribute of the media object.

25 15. A set of XML-based markers according to Claim 9, further comprising a second action marker indicating a second media object, an attribute of the second media object, and a second value of the attribute,

30 wherein the markers represent a function to assign the second value to the attribute of the second media object if the event is detected.

35 16. A set of XML-based markers comprising:
an event marker indicating an event;
a condition marker indicating a state of a first media object; and

an action marker indicating a second media object, an attribute of the second media object, and a value of the attribute,

5 wherein the markers represent a function to assign the value to the attribute of the second media object if the event is detected and if the first media object possesses the indicated state.

10 17. A set of XML-based markers according to Claim 16, wherein the event marker indicates a user event.

15 18. A set of XML-based markers according to Claim 16, wherein the event marker indicates a system event.

20 19. A set of XML-based markers according to Claim 16, wherein, in a case that the event is NULL, the markers represent a function to assign the value to the attribute of the second media object if the first media object possesses the indicated state.

25 20. A set of XML-based markers according to Claim 16, further comprising a second condition marker indicating a second state of a third media object,

30 wherein the markers represent a function to assign the value to the attribute of the second media object if the event is detected, if the first media object possesses the indicated state, and if the third media object possesses the second indicated state.

35 21. A set of XML-based markers comprising: an event marker indicating an event; and

an interpolate marker indicating a media object, an attribute of the media object, a first time, a second time, and a value of the attribute,

wherein the markers represent a function to gradually change a value of the attribute to the end value over a period beginning at the first time and ending at the second time if the event is detected.

22. A set of XML-based markers according to Claim 21, wherein the event marker indicates a user event.

23. A set of XML-based markers according to Claim 21, wherein the event marker indicates a system event.

24. A set of XML-based markers comprising:
an event marker indicating an event;
a condition marker indicating a state of a first media object; and

an interpolate marker indicating a second media object, an attribute of the second media object, a first time, a second time, and a value of the attribute,

wherein the markers represent a function to gradually change a value of the attribute to the end value over a period beginning at the first time and ending at the second time if the event is detected and if the first media object possesses the indicated state.

25. A set of XML-based markers according to Claim 24, wherein the event marker indicates a user event.

26. A set of XML-based markers according to Claim 24, wherein the event marker indicates a system event.

5 27. A set of XML-based markers according to Claim 24, wherein, in a case that the event is NULL, the markers represent a function to gradually change a value of the attribute to the end value over a period beginning at the first time and ending
10 at the second time if the first media object possesses the indicated state.

28. A set of XML-based markers according to Claim 24, further comprising a second condition
15 marker indicating a second state of a third media object,

wherein the markers represent a function to assign the value to the attribute of the second media object if the event is detected, if the first
20 media object possesses the indicated state, and if the third media object possesses the second indicated state.

29. An XML-based marker representing a
25 media object element, the marker comprising:

a test-element attribute for indicating a particular media object element;

a test-attribute attribute for indicating an attribute of the particular element; and

30 a test-value attribute for indicating a test value to compare with a value of the indicated attribute.

30. An XML-based marker indicating that
35 child elements are to be executed in parallel, the marker comprising:

a test-element attribute for indicating a particular media object element;

a test-attribute attribute for indicating an attribute of the particular element; and

5 a test-value attribute for indicating a test value to compare with a value of the indicated attribute.

10 31. An XML-based marker according to Claim 30, wherein the child elements are executed in parallel in a case that the value of the indicated attribute of the particular element is equal to the test value.

15 32. An XML-based marker indicating that child elements are to be executed sequentially, the marker comprising:

a test-element attribute for indicating a particular media object element;

20 a test-attribute attribute for indicating an attribute of the particular element; and

a test-value attribute for indicating a test value to compare with a value of the specified attribute.

25 33. An XML-based marker according to Claim 32, wherein the child elements are executed sequentially in a case that the value of the indicated attribute of the particular element is
30 equal to the test value.